



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

111952

AUG 26 1983

SUBJECT: Approval of a CERCLA Removal Restart, Exemption from the \$2 Million Statutory Limit for Removal Actions and Approval to Perform an Engineering Evaluation/Cost Analysis for the Havertown PCP NPL Site, Haverford Township, Delaware Co., PA

FROM: Stanley L. Laskowski *SL*
Acting Regional Administrator (3RA00)

TO: Richard J. Guimond, Acting Assistant Administrator
Office of Solid Waste and Emergency Response (OS-100)

THRU: Henry Longest II, Director
Office of Emergency and Remedial Response (OS-200)

ATTN: Deborah Y. Dietrich, Acting Director
Emergency Response Division (5202-G)

Issue

The attached CERCLA Removal Restart, \$2 Million Exemption Request and EE/CA Approval Request pertain to the Havertown PCP NPL Site in Haverford Township, Delaware County, Pennsylvania. A removal site assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, by the staff in Region III has identified a present threat to public health or welfare or the environment due to the threat of release of hazardous substances, pollutants or contaminants at the Site. These substances pose the continued threat of an uncontrolled release due to the Site's vulnerability to acts of malicious mischief and arson as a result of uncontrolled access. Also, the continuing degradation of storage vessels containing liquid hazardous substances presents an additional threat of release. Site conditions have deteriorated since the last Removal Action in 1989 which resulted in the expenditure of approximately \$ 800,000. Current Site conditions meet the criteria for a Removal Action.

This Removal Restart Action is an early action proposed by both the Removal and Remedial Programs. Onsite tanks and drums of wood-treating hazardous substances present potential health hazards to any persons living or passing near the Site. Implementation of the remedial actions to remove this threat of release will not be initiated within a time frame consistent with the immediate demands of current dangerous Site conditions.

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In addition to the need for a Removal Restart, there is significant offsite soil contamination which warrants a non-time-critical Removal Action. The initiation of a non-time-critical Removal Action commences with the Regional Administrator's approval of an Engineering Evaluation/Cost Analysis (EE/CA). The EE/CA will be conducted concurrently with the time-critical Removal Action.

Because conditions at the Site meet the criteria set forth in the NCP, §300.415 for Removal Actions and the criteria in CERCLA §104(c)(1)(C) (Exemption from the \$2 Million limit on Removal based on the consistency waiver), and pursuant to the Delegation of Authority 14-2-B giving the Regional Administrator authority to approve continued Removal Actions above \$2 Million pursuant to the consistency waiver at NPL Sites, Region III has approved the use of additional CERCLA funds in the amount of \$1,503,000 to mitigate the threat to public health and the environment. The new project ceiling is \$2,303,000, of which \$1,200,000 is for extramural costs. Additionally, Region III has approved the EE/CA for a non-time-critical Removal Action as proposed.

Attachment: Exemption and Funding Request

AR000011

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

AUG 26 1993

SUBJECT: Request for Funding for a Time -
Critical Removal Action, \$2 Million
Exemption and EE/CA Approval at the
Havertown PCP NPL Site,
Haverford Township, Delaware Co., PA

DATE:

FROM: Kevin Koob, OSC
Western Response Section
(3HW32)

Angie Garcia, RPM
Eastern PA Section
(3HW23)

TO: Stanley L. Laskowski
Acting Regional Administrator (3RA00)

THRU: Abraham Pardo, Associate Division Director for
Superfund Programs (3HW02)

I. ISSUE

An assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, by the On Scene Coordinator (OSC) has identified a threat to human health, welfare and the environment posed by deteriorating tanks and drums of hazardous substances at the Havertown PCP NPL Site ("Site or Havertown Site") which necessitates a Removal Restart. The Site is now in an unguarded condition. Access to the Site is not restricted. In addition to the need for a Removal Restart, present offsite soils contaminated with dioxins and arsenic and deteriorating onsite structures indicate the need for a non-time-critical removal consisting initially of an Engineering Evaluation/Cost Analysis (EE/CA) and subsequent contaminant removal. These identified threats will be addressed at a later date subject to the non time-critical portion of this project.

A. Time-Critical Action

The OSC has determined that a time-critical removal action is appropriate to mitigate the threat posed by the tanks and drums of hazardous substances at the Site which exists in a densely populated area without benefit of physical security. The proposed time-critical removal action will provide for the

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establishment of 24 hour security to restrict access to the Site to all persons including neighborhood children, posting of warning signs which will alert the public to the presence of hazardous substances, modification of the existing perimeter fence to enhance security, drain and remove hazardous substances from aboveground tanks and drums onsite. Previous removal actions have incurred costs of approximately \$800,000. The funds estimated to conduct this action are \$1,503,000. Consequently, the actions proposed herein will require an exemption to the \$2 million statutory limit on removal actions, based on consistency with remedial action to be taken. An exemption to the 12-month statutory limit was approved on December 27, 1988.

B. Non Time-Critical Action

The Remedial Project Manager (RPM) has determined that a non-time-critical removal action is appropriate to address the onsite structures and the presence of elevated concentration of hazardous substances in soils at the Site. The first step of the non-time-critical removal process is the preparation of an EE/CA following approval of the non-time-critical removal request by the Regional Administrator. This memo, in addition to the above stated funding for the time-critical portion of the removal project, also contains a proposal for an EE/CA to be performed at the Site by the RPM, with an estimated cost of \$315,000, which is CERCLA §104(b) money and not subject to the \$2 million statutory limit. Following the EE/CA public comment period, another Action Memo will be submitted to address the work outlined in the EE/CA.

Both the time-critical and non-time-critical removal actions will contribute to the efficient performance of the long-term remedial action planned for the Site.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

The Havertown PCP NPL Site is located in Havertown, Haverford Township, Delaware County, Pennsylvania, approximately 10 miles west of Philadelphia, and is surrounded by a mixture of commercial establishments, industrial companies, parks, schools, and private homes.

The entire Havertown PCP NPL Site consists of approximately 15 acres, roughly delineated by and including Lawrence Road and Rittenhouse Circle to the south, the former Lobb Lumber Site to the west and north, and Continental Auto Parts (CAP) to the West. There is no distinct boundary for the Site to the east. Structures on the property, the former location of National Wood Preservers (NWP), include a sheet metal building with above ground chemical storage tanks.

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From 1947 to 1989, NWP used several wood-treating solutions in both their pressure and dip treatment operation, including 5% pentachlorophenol (PCP) in a petroleum or a mineral spirits solutions, Tantalithe, Chromated Copper Arsenate (CCA), Chromated Zinc Chloride (CZC), and Tributyl Tin Oxide (TBTO).

B. Background of Response Action

In 1947, Samuel T. Jacoby obtained a lease from the Clifford Rogers Estate and constructed National Wood Preservers (NWP). The wood preservation practices at the NWP are summarized as follows. NWP custom-treated wood, as requested by its clients, who supplied the materials to be treated. Historically, two wood-treating processes have been used at this facility: the empty cell pressure treatment process, and a non-pressure dip treatment. The pressure treatment process was carried out in three pressure treatment cylinders onsite. Wood was treated by a non-pressure dip method by simply dipping the wood in a tank of treatment solution. After treatment, the wood was allowed to air dry on drip tracks, which also contributed to soil contamination.

During the period 1947 to 1963, NWP allegedly disposed of wood-treatment waste materials into a 25 to 35 foot deep well, which was reportedly located in the present vicinity of Young's Produce Market. These wastes generally consisted of spent wood-treatment solutions containing pentachlorophenol (PCP) and diesel-type oil.

The areas of concern associated with this response action include NWP, the CAP property and a portion of the Lobb's Lumber property. At the NWP property, there are about 20 drums and 15 tanks which are rusted and present a spill hazard. According to an field hazard evaluation (HAZ-CAT) conducted by the EPA's Technical Assistance Team (TAT) in April, 1992, the tanks probably contain chromated copper arsenate, pentachlorophenol, and chromic acid.

Access to the Site is unrestricted as evidenced by an open gate detected by the OSC while conducting a Site visit on August 6, 1993. Further consultation with the Havertown Fire Marshall at the Site on August 7, 1993 identified serious concerns regarding access to the Site by unauthorized persons as a result of the lack of a security guard. The Fire Marshall also indicated that there is an ongoing investigation into four recent incidents of arson in the local community. The possibility of arson heightens concern for the possibility of the intentional creation of a catastrophe involving fire and explosion which would result in an uncontrolled release of hazardous substances to the surrounding community.

The time-critical removal action will involve the establishment of 24 hour security, posting of warning signs,

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modification of the existing perimeter fence, drainage and removal of the contents of the tanks and drums on the Site.

There are, adjacent to the fenced portion of the Site, active businesses. Workers face long term potential health risks as a result of using a parking lot and a staging area contiguous to the Site which has high levels of arsenic and dioxin detected in the soil. The workers are potentially exposed to direct dermal contact and to the indirect tracking of contaminated soil by shoes and auto tires. Additionally, soil contaminated with high levels of arsenic and some dioxin is on the Lobb's Lumber property. Public contact with these soils is possible from the vehicle traffic and parking in the area.

The non time-critical portion of the removal action will consist of an EE/CA which will include sampling to refine the Remedial Investigation (RI) determination of the extent of contamination in outlined areas.

C. Quantities & Types of Substances Present

At NWP, there are about 15 aboveground tanks with wastes or products related to the wood preserving activities. The tanks contain chromated copper arsenate, pentachlorophenol, and chromic acid. There are also 20 drums containing liquids at NWP. Some of the drums tested positive for flammability and others are labeled as corrosive material. The drums and tanks are rusted and their continued deterioration present a potential spill hazard. There is estimated to be in excess of 89,000 gallons hazardous substances stored in unguarded tanks and drums.

Levels of Arsenic in the surface soils and sediments at Lobb's Lumber range from 95 ppm near the building to 708 ppm in the soils near Eagle Road. There was an arsenic result of 345 ppm in the sediments in the drainage ditch adjacent to Lobb's Lumber. Additionally, dioxin exists in amounts from about 1 ppb (Toxicity Equivalence Factor - TEF) in the surface soils of the drainage ditch to 8.2 ppb TEF in the soils near Eagle Road.

At Continental Auto Parts, high levels of PCP, arsenic, and dioxin exist. Within the old NWP portion of CAP dioxin levels on surface soils are about 7 ppb, and PCP is 230 ppm. In areas of CAP adjacent to NWP, also in surface soils, dioxin is < 1 ppb, PCP is 760 ppm, and arsenic is 1220 ppm.

The identified contaminants are hazardous substances pursuant to Section 101 (14) of CERCLA.

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Contaminant Information

Dioxin

Dioxin exhibits a delayed biological response in many species and is highly lethal at low doses to aquatic organisms, birds, mammals, as well as humans. Dioxin has been shown to be acnegenic, embryoletal, teratogenic, mutagenic, carcinogenic, and to affect the immune responses of mammals. Dioxin is persistent in the environment, and is known to bioaccumulate in aquatic organisms. The toxicity of dioxins varies according to the number and position of chlorine atoms attached to the aromatic ring, with the 2,3,7,8 conformation of chlorine substitutions being the most toxic. The liver is a target organ for dioxin in acute exposures. Acute effects of exposure include chloracne, porphyria, cutanea tarda, hepatotoxicity, psychological alterations, weight loss, thymic atrophy, thrombocytopenia, suppression of cellular immunity and death.

Pentachlorophenol (PCP)

Pentachlorophenol is probably persistent in natural environments. It is embryotoxic and fetotoxic. Chronic exposure has been shown to cause chloracne, headache, muscle weakness, weight loss, and liver and kidney damage. Technical grade pentachlorophenol is often contaminated with polychlorinated dibenzo-p-dioxins, and these contaminants may be responsible for some of the toxic effects associated with exposure to pentachlorophenol. Pentachlorophenol is highly toxic to aquatic organisms.

Arsenic

Arsenic is a metal that is present in the environment as a constituent of many organic and inorganic compounds. Arsenic is a known human carcinogen implicated in skin cancer in humans. Inhalation of arsenic by workers is known to cause lung cancer. Arsenic compounds cause chromosome damage in animals, and humans exposed to arsenic compounds have an increased incidence of chromosomal aberrations. Arsenic compounds are reported to be teratogenic, fetotoxic, and embryotoxic in some animal species. Dermatitis and associated lesions are attributable to arsenic coming into contact with the skin, with acute dermatitis being more common than chronic. Chronic industrial exposures may be characterized by hyperkeratosis, and an accompanying hyperhydrosis (excessive sweating usually of the palms and soles of the feet).

D. National Priorities List Status

The Site was proposed for inclusion on the National Priorities List ("NPL") pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, and was listed on the NPL in 1982.

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E. State and Local Authorities' Roles

In 1962, the Pennsylvania Department of Health became aware of contamination in Naylors Run, a small watercourse located to the east of the Site, and linked the source to waste disposal practices at the NWP site. In 1963, Harris Goldstein acquired the operations of the wood-treatment facility and continued to lease the property from the Rogers Estate until 1992.

In 1972, the Commonwealth of Pennsylvania Department of Environmental Resources (PADER) received complaints from local citizens concerning an oily substance being discharged into Naylors Run. PADER investigated and identified contaminated groundwater discharging from a storm sewer into Naylors Run just east of Philadelphia Chewing Gum Company (PCG). PADER ordered NWP and Clifford A. Rogers to conduct a cleanup; however, the cleanup was never undertaken.

The Havertown site was placed on the National Priority List in 1982. A Remedial Investigation/Feasibility Study RI/FS was conducted by R.E. Wright Associates in 1988 under contract to PADER, resulting in a Remedial Investigation Report (September, 1988) and a Feasibility Study (August, 1989). A Record of Decision (ROD) for Operable Unit One was issued for the Havertown site by the USEPA on September 29, 1989, which addressed the cleanup of wastes currently staged on the site from previous investigative actions, and the interim remedial measure of designing and installing an oil/water separator at the storm drain outlet along Naylors Run.

A second ROD for Operable Unit Two was issued for Havertown by USEPA on September 30, 1991, which addressed the cleanup of the shallow groundwater through an underground collection drain and a groundwater treatment plant.

A RI/FS for OU3 is currently being undertaken by USEPA to address soil contamination, deep groundwater and how groundwater could be affected by soil contamination.

On August 7, 1993 the Havertown Fire Marshall met with the OSC onsite to conduct an evaluation of Site security and access issues. The Site is not afforded any measure of security other than a fence. The fence in some segments is inadequate due to its height, to deter trespassing and there are no "Hazardous Materials" warning signs posted. Additionally, gates were detected open on a Site visit conducted by the OSC on August 6, 1993. As a result, it has been determined that access to the portion of the Site housing liquid hazardous materials is unrestricted to the local population including children living in the adjacent residential neighborhood.

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III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Conditions at the Site pose a threat to public health, welfare and/or the environment. Section 300.415 of the National Contingency Plan ("NCP") lists the factors to be considered in determining the appropriateness of a removal action. Section 300.415 of the NCP, paragraphs (b)(2)(i), (iii), and (vii) all directly apply to the liquid hazardous substances and existing soil contamination at the Havertown Site.

A. Time-Critical

300.415 (b) (2) (i)

"Actual or potential exposure to nearby human populations, animals or food chain from hazardous substances or pollutants or contaminants"

The hazardous substances on the Site include PCP, dioxin isomers and arsenic. Approximately 89,000 gallons of liquid hazardous substances in tanks and drums is stored on the Site in an unguarded condition. Approximately, 18,000 individuals live within one mile of the Havertown PCP site. The Lynnewood Elementary School is approximately one half mile from the site. Within a quarter mile of the site are approximately 350 residential properties. About a dozen workers and 12 residential properties are located within 500 feet of the site.

300.415 (b) (2) (iii)

"Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release"

At NWP, there are currently 15 aboveground tanks with hazardous substances related to the wood-preserving activities. The those hazardous substances include chromated copper arsenate, pentachlorophenol, and chromic acid. There are also 20 drums containing liquids at NWP. The contents of some of the drums must be treated as hazardous substances since they are either labeled corrosive or have had a positive result for the RCRA flammability test. The drums and tanks are old and rusted and their continued deterioration threatens a spill at any time. These containers should be emptied as soon as possible.

Access to the Site is unrestricted. There is no security or guard service in place to deter trespassing. Acts of malicious mischief or arson resulting in an uncontrolled release of the hazardous substances identified can be executed with impunity

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having a catastrophic consequent effect on the health and welfare of the members of the community due to the subsequent uncontrolled release of hazardous substances.

B. Non-Time Critical

300.415 (b) (2) (i)

"Actual or potential exposure to nearby human populations, animals or food chain from hazardous substances or pollutants or contaminants"

Once the Time-Critical-Removal is completed, the hazardous substances in soil would still include PCP, dioxin isomers and arsenic. Approximately, 18,000 individuals live within one mile of the Havertown PCP site. Within a quarter mile of the site are approximately 350 residential properties. About a dozen workers and 12 residential properties are located within 500 feet of the site.

Contamination of the soils may present a potential human health impact from direct long term contact, particularly to workers at Continental Auto Parts. The potential excess carcinogenic risk is calculated to be 1 additional cancer per 50 individuals who are exposed over a 25 year period (2×10^{-2}). Any workers exposed to contaminated soils with arsenic and dioxin at Lobb's Lumber Co. would have an excess carcinogenic risks calculated to be greater than 1 additional cancer per 10,000 individuals who are exposed over a 25 year period (10^{-4}). These levels of risk are considered unacceptable to EPA. Additionally, long term exposure to the soils pose a non-carcinogenic health risk greater than 10^{-4} .

This situation requires additional investigation and subsequent non-time-critical removal action.

300.415 (b) (2) (vii)

"The availability of other appropriate federal or state response mechanisms to respond to the release"

PADER does not have the resources at this time to effect the necessary removal response action at the Site.

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IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to the public health or welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Time-Critical Removal Action

As indicated above, there are currently 15 aboveground tanks with wastes or products related to the wood-preserving activities. There are also 20 drums at NWP. The tanks will be drained and the waste disposed offsite, to the extent practicable. The drums will be disposed offsite. The Site will be further investigated to determine the presence of any other containers storing hazardous substances. The perimeter fence will be enhanced to impede trespassers from gaining access to the Site. Warning signs will be posted on the fence to alert the public to the presence of hazardous materials. Completion is expected within 6 months.

B. Estimated Cost of Time-Critical Removal Action

Previous Removal Actions	\$800,000
Extramural	
- Emergency Response Contractor	1,000,000
Contingency (20%)	200,000

Extramural Total	\$1,200,000
Intramural	
- EPA Direct	\$203,000
- EPA Indirect	100,000

Intramural Total	\$303,000
 Total Requested Increase	 \$1,503,000
 Total Project Ceiling	 \$2,303,000

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C. Non-Time Critical Removal Action - (EE/CA)

TAT will prepare and implement a sampling plan to refine the determination of the extent of contamination in offsite areas. This additional analytical data will yield more accurate volume estimates, and consequently, a better cost analysis. TAT will also assist the RPM in preparing the EE/CA. The RPM expects to complete the EE/CA within 6 months.

D. Estimated Cost of Non-Time Critical Removal Action - EE/CA

TAT	\$ 50,000
CLP	200,000
EPA	25,000
Contingency (15%)	40,000

Total	\$315,000

E. Contribution to Remedial Performance

Both the time-critical and non-time-critical removal actions will contribute to the efficient performance of the long-term remedial action expected to be addressed under OU1, OU2, and OU3 insofar as there is no Operable Unit Record of Decision concerning the contents of the tanks and drums.

F. Compliance with ARARs

The proposed removal actions set forth in this memo will comply with all applicable and relevant and appropriate environmental and health requirements, to the extent practicable, considering the exigencies of the situation. Such requirements may include regulations under the Resource Conservation and Recovery Act for re-containerizing dioxin waste and for manifesting waste. ARARs for any alternative in the non-time-critical portion will be explored and enumerated in greater detail in the EE/CA.

The Pennsylvania Department of Environmental Resources (PADER) has been contacted and Pennsylvania ARAR's have been provide to US EPA. The PA ARAR's identified by PADER pertain to contaminated soils. There where no PA ARAR's provided by PADER pertaining to the issues associated with the time-critical portion of this project.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION DELAYED

The storage tanks and drums onsite will continue to deteriorate. As the Site access is unrestricted, a catastrophic release could occur as a result of mischief or arson if no action is taken to mitigate this threat. Delayed action will increase

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public health risks to workers and the general public from exposure to contaminated soils. The portion of the Lobb Lumber property that is contaminated is adjacent to a busy road and there are no access restrictions.

VII. EXEMPTION FROM STATUTORY LIMITS

The Site time-critical removal action meets the consistency exemption criteria in CERCLA Section 104(c), 42 U.S.C. §9604(c), to exceed the \$2 million statutory limit for Removal Actions.

Section 104(c)(1)(c) "Continued response action is otherwise appropriate and consistent with the remedial action to be taken."

The removal actions for which funding is being requested are consistent with future remedial actions which may be undertaken at this Site, and are consistent with actions routinely taken at sites with similar problems. Additional information will be gathered during the EE/CA which will assist with possible selection of other long-term alternatives. The proposed Removal Restart Actions are not expected to impede the implementation of any possible future remedial actions and are intended only to deal with the immediate threat posed by the Site. The EE/CA will investigate alternatives to mitigate the threat of exposure to contaminated soils offsite and will build upon information provided during the Remedial Investigation. The OSC's proposed time-critical actions and the RPM's proposed non time-critical actions are consistent with actions previously taken at similar sites, and will eliminate the most serious threat to the public and the environment.

VIII. ENFORCEMENT

EPA has previously determined, in connection with prior Operable Units, that the Potentially Responsible Parties were not capable of performing or financing necessary remedial actions.

IX. RECOMMENDATION

Because conditions at the Havertown PCP NPL Site meet the criteria in NCP 40 C.F.R. § 300.415 for a removal action and the statutory exemption criteria in Section 104(c) of CERCLA, based on the consistency waiver, I recommend your approval of this Removal Action. The requested increase is \$1,503,000, of which \$1,200,000 is for extramural cleanup contractor costs. The new total project ceiling (including past Removal Actions) is 2,303,000. I also recommend your approval to initiate the

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Engineering Evaluation/Cost Analysis as proposed in this request.
You may indicate your approval or disapproval by signing below.

A. Approval of Time-Critical-Removal

APPROVED: _____

X [Signature] P. Stankowski

DATE: _____

8/26/93

DISAPPROVED: _____

DATE: _____

B. Approval of Non-Time-Critical-Removal - EE/CA

APPROVED: _____

X [Signature] P. Stankowski

DATE: _____

8/26/93

DISAPPROVED: _____

DATE: _____

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